Walking Trail Use Among a Sample of Black, White, Hispanic, and Asian Adult Walkers

Lorna H. McNeill, Karolina Murguia, Nga Nguyen, and Wendell C. Taylor

Background: Walking trails are positively associated with physical activity; however, few studies have been conducted among diverse communities. We sought to describe trail use and the physical and social environmental correlates of trail use in a racially/ethnically diverse sample. Methods: We administered an on-site trail intercept survey to walkers on a trail (N = 175). We assessed frequency/duration of trail use, reasons for using the trail, perceptions of the trail, demographics and BMI. Results: Walkers were primarily young (mean age = 37.8 years, SD = 11.8) and overweight (mean BMI = 25.2 kg/m², SD = 4.2). Time spent on the trail and frequency of trail use differed significantly by age (P = .004) but not race/ethnicity. Perceptions of the trail differed significantly by sex and race/ethnicity (P-values = .001, .014, respectively). In regression models, different factors predicted time spent on the trail and frequency of trail use. Conclusions: Walkers were frequent users of the trail and cited many favorable features of the trail that encouraged their use. Duration and frequency of trail use did not differ by race/ethnicity or sex, thereby indicating that when provided with safe access, racial/ethnic minorities and women may be likely to use trails at rates similar to those of Whites and men.

Keywords: physical activity, racial/ethnic minorities, obesity, environment
Still others have suggested that the distance from walkers’ home to the trail is negatively associated with trail use. Krizek et al found that living within walking distance of a trail increased use of the trail. Other factors that were correlated with trail use include drinking water facilities and benches. Still unknown is how these factors may influence physical activity choices and decisions among racial and ethnic minorities. To increase physical activity in these groups, greater information about the factors that influence their use of recreation trails is needed.

As researchers and policy makers continue to promote the building of neighborhood and recreation trails as an approach for increasing physical activity, more information is needed as to how racial and ethnic minorities use and perceive trails as a potential physical activity resource. It is important to understand how trail use differs among trail users in order to 1) promote trails among groups most likely to use them and 2) encourage trail use among those with barriers to use. Therefore, using an on-site trail intercept survey, we sought to examine physical activity patterns and their correlates among a racially diverse sample of adults who were actively using a neighborhood trail. Specifically, we sought to 1) describe the frequency of trail use, the time spent using the trail, and the sociodemographic factors associated with these outcomes; and 2) determine if physical and social environmental correlates of trail use differed by sociodemographic factors. We had no specific hypothesis given the inconsistencies in the literature already noted.

Methods

Study Design

We used an intercept-based survey approach. On-site intercept surveys have a long history of use in the recreation and leisure research domains for better understanding people’s use of outdoor, natural environments, such as trails, for physical activity. On-site surveys allow for the collection of real-time information about trail users and their physical activity habits. This study took place for 6 weeks from May to June 2008. This study was approved by the Institutional Review Board at MD Anderson Cancer Center and informed consent was obtained from each participant.

Procedure and Sample

Participants were walkers who were stopped as they walked on the trail and were asked to complete a brief (~5 minutes) self-administered survey (eg, intercept survey) about their physical activity and trail use habits. At the completion of the intercept survey, participants were asked to complete a follow-up survey, to be completed at home, that contained additional, more in-depth questions about their physical activity habits and their environment. The current paper reports data from the intercept survey only. Participants received a pedometer as compensation for completing the on-site survey. To be eligible to participate in the study, participants had to be at least 18 years of age, actively using the recreation trail (eg, walking), able to self-identify their race/ethnicity for recruitment accrual purposes, and able to speak and write English or Spanish (intercept survey was provided in both languages).

To recruit as many participants as possible, we conducted trail intercept surveys 2 times per day during random, predetermined blocks of time (7–11 AM, 11 AM–3 PM, 3–6 PM, and 6–9 PM) at selected parts of the trail. Trained interviewers stopped every walker as he or she was walking on the trail and asked him or her to participate in the study. Our goal was to recruit every walker who was using the trail during the predetermined blocks of time. From 6–8 PM, during which trail use was heavy, we used a random sample approach and approached every third person. We cannot report a true response rate given that not every individual was stopped and asked to participate; however, we collected data on refusals, the race/ethnicity and sex of those who refused (as determined by the research coordinator), and reasons for refusals, when possible.

Recreation Trail/Neighborhood Characteristics

The surveys were administered in a newly developed master-planned community in the greater Houston area. Built in 2002, it comprises more than 3500 acres, 700 of which were planned for green belts and community parks, 300 acres of recreational lakes, a planned 22-mile hike and bike network, and shopping and dining within walking distance. It is a mixed-income community with home prices that range from $140,000 to $1 million. Census data were not available because of the recency of the community; however, the elementary school zoned to this neighborhood reported that the racial/ethnic composition was 20% White, 18% Hispanic, 35% Black, and 27% Asian, making this a very racially and ethnically diverse neighborhood.

The trail is primarily composed of interconnected streets that also connect to trail segments, such that some parts of the trail represent neighborhood streets and other parts traverse through the neighborhood and are not located near a major road. Residents can access the trail by walking from their home to any main road within the community. As a result, there is no main entrance or exit area from which to recruit participants. Given this, we had to recruit participants from major roads within the subdivision. Neither the community nor the trail is closed or gated. Individuals who use the trail likely live in the community, but the trail is likely also used by others in the surrounding city and areas who drive/bike to the trail.

Measures

The on-site intercept survey comprised items used by other trail investigators from previous studies with additional information specific to the purposes of this study. Participants were asked about their trail use, reasons for using the trail, other physical activities performed outside of trail use, perception of trail characteristics, sociodemographic characteristics, and health status.

Trail Use. Participants were asked about their activities while on the trail that day, including whether they lived in the trail community (Yes/No), how long they have been using the trail (< 1 month, more than 1 year), how often they used the trail (< 1 per month, 1 per month, 1 per week, more than 1 year), how often they used the trail (< 1 per month, 1 per month, 1 per week, < 1 per month, < 1 per week, > 1 time per week, daily), their planned length of time on the trail (15, 30–45, 45–60, and > 60 min), and with whom they were using the trail (using it alone, with someone, with a pet, or other).

Reasons for Using Trail. Participants were asked to rate each of the following characteristics on a scale of 1 to 5 (1 = least important, 5 = most important) as an important reason for using the trail: safety (ie, free from personal injury), scenery (ie, beauty of the environment), access (ie, no cost associated with use), terrain (ie, flat, paved), and convenience (ie, location).

Physical Activities. Participants were asked to choose from 9 activities in which they may have engaged in the past week. Example activities included swimming, bicycling, running, etc. The number of activities was summed.

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Perceptions of Trail Features. Participants were asked to rate, from strongly agree to strongly disagree, their perceptions of 9 trail features (eg, free from garbage and litter, safety from traffic and crime, trail maintenance). Trail features were summed.

Sociodemographics. We collected data on each participant’s age, sex, marital status, number of children living at home, race/ethnicity, employment status, educational attainment, and household income.

Body Mass Index (BMI). Body mass index (kg/m²) was determined based on self-reported height and weight.

Data Analysis

Frequencies and descriptive statistics were used to describe participant characteristics. Differences in demographic characteristics by the time spent on the trail that day, general frequency of trail use, whether they were walking with anyone, importance of the reason for using the trail and safety and aesthetics of the trail were determined using a chi-square test and analysis of variance. The association between the time spent on the trail and the frequency of trail use and predictors (eg, age, importance of the reason for using the trail, BMI, exercising with others, and the number of activities other than trail use) were examined by a series of logistic regression models. Unadjusted models were constructed for each predictor to access its relationship with the outcome variable in the univariate logistic regression analyses. To control for confounding factors, a second set of models, adjusted for age, sex, educational attainment, BMI, and the physical component scale, were used in multiple logistic regression. The third set of models included all predictors while controlling for sociodemographic factors.

In the selection of the best combination of variables to predict the time spent on the trail and the frequency of trail use (final model), a full stepwise selection procedure was used for the third set of multiple logistic regression models. The stepwise selection included a forward selection process initially, followed by a reevaluation at each step, of all variables to identify the variables that were eligible for removal. All analyses were performed using SAS v.9.2 (SAS Institute, Cary, NC).

Results

Participant Sociodemographics

A total of 274 people were approached to participate in the study. Of those, 194 enrolled, resulting in a 71% response rate. Those who refused to participate (N = 80) were more likely to be women (55%) and Asian (33%; Black = 21%, White = 20%; Hispanic 15%; 11% race unknown). Study participants with complete data (n = 175) were primarily young (mean age = 37.8 years, SD = 11.8) and overweight (mean BMI = 25.2 kg/m2, SD = 4.2) (Table 1). Participants were

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Demographic Characteristics of the Participants (n = 175)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics</td>
<td>N (%) / Mean (SD)*</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>76 (43.4)</td>
</tr>
<tr>
<td>Female</td>
<td>99 (56.6)</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>61 (34.9)</td>
</tr>
<tr>
<td>Asian</td>
<td>41 (23.4)</td>
</tr>
<tr>
<td>Latino</td>
<td>20 (11.4)</td>
</tr>
<tr>
<td>White</td>
<td>53 (30.3)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>High school/GED or less</td>
<td>14 (8)</td>
</tr>
<tr>
<td>Some college/technical school</td>
<td>31 (17.8)</td>
</tr>
<tr>
<td>College graduate</td>
<td>129 (74.1)</td>
</tr>
<tr>
<td>Income</td>
<td></td>
</tr>
<tr>
<td>&lt; $50,000</td>
<td>15 (9.7)</td>
</tr>
<tr>
<td>$50,000–$99,000</td>
<td>65 (41.9)</td>
</tr>
<tr>
<td>≥ $100,000</td>
<td>75 (48.4)</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
</tr>
<tr>
<td>&gt; 40 years</td>
<td>108 (63.9)</td>
</tr>
<tr>
<td>≥ 40 years</td>
<td>61 (36.1)</td>
</tr>
<tr>
<td>BMI</td>
<td>25.2 (4.2)</td>
</tr>
<tr>
<td>Time spent on trail today</td>
<td></td>
</tr>
<tr>
<td>Less than 30 minutes</td>
<td>41 (24.6)</td>
</tr>
<tr>
<td>30 minutes or more</td>
<td>126 (75.4)</td>
</tr>
<tr>
<td>Frequency of trail use per week</td>
<td></td>
</tr>
<tr>
<td>3 times or less</td>
<td>101 (60.5)</td>
</tr>
<tr>
<td>4 times or more</td>
<td>66 (39.5)</td>
</tr>
</tbody>
</table>

* n (%) = frequency and percentage; Mean (SD) = mean and standard deviation.
Black (35%), Asian (23%), Hispanic (11%), and White (30%).
The majority (90%) had annual household incomes of $50,000
or more and were college graduates (74%). In terms of proximity
to the trail, most participants (85%) lived in the community; 58%
reported using the trail for more than 1 year. About 40% of all trail
users used the trail 4 or more times per week, and 75% planned
to spend 30 minutes or more on the trail that day.

Frequency of Trail Use and Time Spent
Using the Trail

Table 2 summarizes the frequency of trail use and the time spent on
the trail. Daily use of the trail was the low (15%), with the majority
of participants stating they used it 3 times per week or less (60.5%).
The time spent on the trail differed significantly by age (P = .004).
Participants 40 years and older were more likely to spend 30 min-
utes or more walking on the trail that day. The time spent on the
trail did not differ significantly by race/ethnicity or sex. Similar-
ly, the frequency of trail use differed significantly by age (P = .004).
Participants 40 years and older were more likely to use the trail 4
or more times per week. The frequency of trail use did not differ
significantly by race/ethnicity or sex.

Social and Physical Environmental Correlates
of Trail Use

Table 3 summarizes social support and engagement in other physical
activities by sociodemographic factors. At the time of the intercept
survey, 58% of participants were walking with someone on the trail,
25% were alone, and 10% were walking with a pet (7% selected 2
or more responses; ie, walking alone and walking with a pet).
Participants younger than 40 years (P = .012) and Latinos (P = .035)
were significantly more likely to be walking with someone at the
time of the intercept. The likelihood of the participants walking with
someone did not differ by sex. On average, participants engaged in
2.6 (SD = 1.7) activities (ie, swimming) other than walking on the
trail; this number differed significantly by race/ethnicity (P = .030).

The top 4 very important reasons for using the trail were to
exercise (82%), to reduce stress (67%) to enjoy nature/outdoors (63%),
and to lose weight (52%) (Table 4). Women and those
younger than 40 years were significantly more likely to identify
weight loss and stress reduction, respectively, as very important
reasons for using the trail. The reasons for using the trail did not
differ significantly by race/ethnicity. Participants noted the follow-
ing important environmental features of the trail: safety from crime
(85%), safety from traffic (90%), free of garbage (94%), and well
maintained (97%). Women and Blacks were more likely to report
the walking trail as aesthetically pleasing.

Adjusted odds ratios (ORs) and 95% confidence intervals
(CIs) for time spent on the trail (< 30 minutes vs. ≥ 30 minutes)
and frequency of trail use (≤ 3 times/week vs. ≥ 4 times/week)
are presented in Table 5. The odds of spending ≥ 30 minutes on the trail
was greater among participants 40 years and older than those < 40
years (OR = 9.01, 95% CI = 2.50–32.48) and those overweight
than those normal/underweight (OR = 13.71, 95% CI = 2.98–62.99).
The odds of spending ≥ 30 minutes on the trail was less among those
who reported that exercise was a somewhat/not very important reason
for using the trail than a very important reason (OR = 0.35, 95%
CI = 0.13–0.96). In predicting the frequency of trail use (≤ 3 times/
week vs. ≥ 4 times/week), walkers who engaged in more physical
activities other than using the trail (OR = 1.40, 95% CI = 1.13–1.75)
and walkers who exercised alone or with a pet (OR = 2.17, 95% CI
= 1.03–4.56) were more likely to use the trail 4 or more times per
week; there was a trend by age, but this relationship did not reach
statistical significance (OR = 1.98, 95% CI = 0.93–4.24).

Discussion

In this study, we sought to determine the individual, social, and
physical environmental correlates of recreational trail use among a
racially/ethnically diverse sample of adults. We found that age con-
sistently predicted the frequency and duration of trail use; compared
with their younger counterparts, adults 40 years and older were
significantly more likely to spend 30 minutes or more on the trail
and to use the trail 4 times or more per week. This finding is not
consistent with the majority of published studies that have indicated
that physical activity declines with age.8,30,31 In a national cross-
sectional study, Librett et al found that weekly and monthly trail use
declined with age, with those ages 18–44 being 1.9–2.9 times more
likely than adults ≥ 65 years to use trails at least once per month.30
In the current study, we found that trail use may increase with age;
however, our age categories are cruder, with those 40 to 64 groups
matched with those 65 years and older. Nonetheless, promoting
safe and accessible trails to adults ages 40 and older may increase
physical activity engagement.

Surprisingly, the duration and frequency of trail use did not differ
significantly by race/ethnicity or sex.27,32 This important
finding suggests that when trails are convenient, safe, and aestheti-
cally appealing, racial/ethnic minorities and women will use this
resource. Several studies have noted that racial/ethnic minorities are
actually more likely than Whites to use parks and recreational trails
when available.16,33 Effective interventions are therefore needed to
increase access to safe recreational trails and to increase the use of
recreational trails among these populations.

The majority of participants in this study were using the trail
with someone (eg, friend, spouse, or children), especially Latinos
(88%). Social support is positively associated with physical activity1
and women and racial/ethnic minorities report a preference for
social support for physical activity.34 However, findings from our
logistic regression found that exercising alone or with a dog was
associated with increased frequency of trail use compared with
those exercising with someone. This finding significantly diverges
from the literature regarding the positive relationship between social
support/companionship and trail use,14,32,35 particularly among
women and the overwhelming majority of studies cite social sup-
port as optimal for increasing motivation for physical activity.14
However, walking in a safe and aesthetically pleasing environment
may therefore reduce the need for others to be with you, as there is
less opportunity for boredom and a reduced fear of personal harm.
More research is needed on individual preferences for recreational
trail use, as they may vary based on age, sex, or race/ethnicity, as
was found in our study.

Participants reported exercise, enjoying nature/outdoors,15 and
stress reduction16 as their most important reasons for using the recre-
ational trail, closely followed by the desire to lose weight. Women
were more likely to report weight loss as a very important reason
for using the trail, perhaps reflecting the rate of obesity in this sample.
In our study, women were significantly more likely than men to rate
the recreational trail as safe and aesthetically pleasing, and Blacks
were more likely than all other groups to rate the trail as aestheti-
cally pleasing. These findings are consistent with previous studies
that have demonstrated that aesthetics and safety are positively
<table>
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<tr>
<th>Outcome</th>
<th>Age</th>
<th></th>
<th>Sex</th>
<th></th>
<th>Race/ethnicity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 40</td>
<td>≥ 40</td>
<td>Male</td>
<td>Female</td>
<td>Black</td>
<td>Asian</td>
</tr>
<tr>
<td>Time spent on trail today</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 30 minutes</td>
<td>34 (31.8)</td>
<td>7 (11.7)</td>
<td>18 (23.7)</td>
<td>24 (24.7)</td>
<td>12 (19.7)</td>
<td>13 (32.5)</td>
</tr>
<tr>
<td>30 minutes or more</td>
<td>73 (68.2)</td>
<td>53 (88.3)</td>
<td>58 (76.3)</td>
<td>73 (75.3)</td>
<td>49 (80.3)</td>
<td>27 (67.5)</td>
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<tr>
<td>Trail use per week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3 times or fewer</td>
<td>74 (68.5)</td>
<td>27 (45.8)</td>
<td>44 (58.7)</td>
<td>60 (61.2)</td>
<td>36 (59.0)</td>
<td>28 (70.0)</td>
</tr>
<tr>
<td>4 times or more</td>
<td>34 (31.5)</td>
<td>32 (54.2)</td>
<td>31 (41.3)</td>
<td>38 (38.8)</td>
<td>25 (41.0)</td>
<td>12 (30.0)</td>
</tr>
<tr>
<td>Outcome</td>
<td>Age</td>
<td></td>
<td>Sex</td>
<td></td>
<td>Race/ethnicity</td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
<td></td>
<td>&lt; 40</td>
<td>≥ 40</td>
<td>Male</td>
<td>Female</td>
<td>Black</td>
<td>Asian</td>
</tr>
<tr>
<td>Exercise with others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alone or with a pet</td>
<td>32 (34.4)</td>
<td>30 (55.6)</td>
<td>0.012</td>
<td>35 (48.6)</td>
<td>29 (36.3)</td>
<td>0.123</td>
</tr>
<tr>
<td>With someone</td>
<td>61 (65.6)</td>
<td>24 (44.4)</td>
<td></td>
<td>37 (51.4)</td>
<td>51 (63.8)</td>
<td></td>
</tr>
<tr>
<td>Number of activities other than trail use</td>
<td>2.6 (1.8)</td>
<td>2.6 (1.6)</td>
<td>0.846</td>
<td>2.7 (1.8)</td>
<td>2.6 (1.7)</td>
<td>0.894</td>
</tr>
</tbody>
</table>
### Table 4  Reasons for Using Trail, Safety, and Aesthetics of Neighborhood by Age, Sex, and Race/Ethnicity

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Age</th>
<th>Sex</th>
<th>Race/ethnicity</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;40</td>
<td>≥40</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Importance for using the trail</td>
<td>N (%) / Mean (SD)</td>
<td>N (%) / Mean (SD)</td>
<td>N (%) / Mean (SD)</td>
<td>N (%) / Mean (SD)</td>
</tr>
<tr>
<td>Lose weight</td>
<td>55 (52.9) / 23 (39.7)</td>
<td>44 (59.5) / 36 (38.3)</td>
<td>25 (42.4) / 21 (52.5)</td>
<td>6 (33.3) / 28 (35%) / 0.106</td>
</tr>
<tr>
<td></td>
<td>49 (47.1) / 35 (60.3)</td>
<td>30 (40.5) / 58 (61.7)</td>
<td>34 (57.6) / 19 (47.5)</td>
<td>12 (66.7) / 23 (26.1%)</td>
</tr>
<tr>
<td>Reduce Stress</td>
<td>41 (39.8) / 13 (22.8)</td>
<td>29 (39.2) / 25 (27.2)</td>
<td>14 (24.1) / 17 (42.5)</td>
<td>6 (33.3) / 17 (34.0) / 0.029</td>
</tr>
<tr>
<td></td>
<td>62 (60.2) / 44 (77.2)</td>
<td>45 (60.8) / 67 (72.8)</td>
<td>44 (75.9) / 23 (57.5)</td>
<td>12 (66.7) / 33 (66.0)</td>
</tr>
<tr>
<td>Exercise</td>
<td>23 (21.9) / 8 (13.6)</td>
<td>15 (20.3) / 16 (16.7)</td>
<td>7 (11.7) / 10 (25.0)</td>
<td>2 (11.1) / 12 (23.1) / 0.190</td>
</tr>
<tr>
<td></td>
<td>82 (78.1) / 51 (86.4)</td>
<td>59 (79.7) / 80 (83.3)</td>
<td>53 (88.3) / 30 (75.0)</td>
<td>16 (88.9) / 40 (76.9)</td>
</tr>
<tr>
<td>Outdoors/enjoy nature</td>
<td>41 (39.0) / 19 (34.5)</td>
<td>28 (38.4) / 33 (35.9)</td>
<td>19 (33.9) / 17 (42.5)</td>
<td>4 (22.2) / 21 (41.2) / 0.576</td>
</tr>
<tr>
<td></td>
<td>64 (61.0) / 36 (65.5)</td>
<td>45 (61.6) / 59 (64.1)</td>
<td>37 (66.1) / 23 (57.5)</td>
<td>14 (77.8) / 30 (58.8)</td>
</tr>
<tr>
<td>Safety</td>
<td>8.5 (1.5) / 8.7 (1.2)</td>
<td>8.3 (1.4) / 8.7 (1.4)</td>
<td>8.6 (1.6) / 8.5 (1)</td>
<td>8.1 (1.8) / 8.7 (1.1) / 0.576</td>
</tr>
<tr>
<td>Aesthetics</td>
<td>20.8 (2.4) / 21 (2.1)</td>
<td>20.2 (2.1) / 21.3 (2.4)</td>
<td>21.6 (2.2) / 20.4 (1.8)</td>
<td>20.3 (3.5) / 20.4 (2.1) / 0.014</td>
</tr>
<tr>
<td>Bicycle riders should not be allowed on the rec trail</td>
<td>54 (50.0) / 23 (37.7)</td>
<td>37 (48.7) / 41 (41.4)</td>
<td>28 (45.9) / 15 (36.6)</td>
<td>4 (20.0) / 31 (58.5) / 0.433*</td>
</tr>
<tr>
<td>Strongly disagree/Disagree</td>
<td>33 (30.6) / 22 (36.1)</td>
<td>22 (28.9) / 35 (35.4)</td>
<td>18 (29.5) / 17 (41.5)</td>
<td>10 (50.0) / 12 (22.6)</td>
</tr>
<tr>
<td>Neutral</td>
<td>21 (19.4) / 16 (26.2)</td>
<td>17 (22.4) / 23 (23.2)</td>
<td>15 (24.6) / 9 (22.0)</td>
<td>6 (30.0) / 10 (18.9)</td>
</tr>
</tbody>
</table>

* Used Fisher's Exact test.
associated with increased physical activity,7,37,38 particularly among women and Blacks.39,40

Findings from our logistic regressions showed that engaging in physical activities other than using the recreational trail was associated with greater frequency of trail use. Few recreational trail users reported the trail as their sole form of activity; rather, it is one of many activities. Overweight adults were also more likely than normal weight adults to spend 30 minutes or more on the trail. These findings differ from previous reports in the literature in that overweight adults generally report less frequent trail use than do normal weight adults.30

This study had several strengths and limitations. Although we achieved an acceptable response rate (71%), participation could have been better. Other intercector-based studies have achieved higher response rates; however, the majority of those studies queried participants at specific access points.26 In this study participants were stopped as they were already exercising, which likely limited participation. In addition, depending on when the intercept took place, participants were self-reporting their plans for engaging in physical activity that day, which may not have reflected the actual amount of time spent on the trail that day. This was also a high socioeconomic status group and our findings are not generalizable to the community as a whole or to those of lower socioeconomic status. Nonresponse bias was also likely an issue, as we could not determine whether there were differences between those who chose to participate and those who chose not to participate. In addition, given the sample size we were unable to more precisely categorize age into more commonly used categories (ie, 20–29, 30–39, etc.). As a result, our findings with respect to age should be interpreted with this as a limitation. Finally, we included walkers only, as pilot testing revealed that runners and bicyclers were unwilling or unable to stop and participate in the study. Therefore, we cannot generalize these findings to those engaged in other types of physical activity.

In summary, recreational trails are a convenient and accessible resource for physical activity. In this racially/ethnically diverse sample of adults, participants were frequent users of the trail and cited many favorable features of the trail that encouraged their use of the trail. The duration and frequency of trail use did not differ by race/ethnicity or sex, thereby indicating that when provided with safe access, racial/ethnic minorities and women are likely to use recreational trails at rates similar to those of Whites and men, respectively. Providing access to sidewalks and well-maintained recreational trails within one’s own neighborhood may help all groups, specifically women and racial/ethnic minorities, meet physical activity recommendations as well as increase walking behavior.41

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References


<table>
<thead>
<tr>
<th>Variables</th>
<th>OR (95% CI)</th>
<th>P</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1*: Predict time spend on trail today (ref = &lt; 30 minutes)</td>
<td>0.2538</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group (ref = younger than 40 years)</td>
<td>9.01 (2.50–32.48)</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>Importance for using the trail: Exercise (ref = very important)</td>
<td>0.35 (0.13–0.96)</td>
<td>0.041</td>
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<tr>
<td>BMI group (ref = normal/underweight)</td>
<td>13.71 (2.98–62.99)</td>
<td>0.005</td>
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</tr>
<tr>
<td>Overweight</td>
<td>2.12 (0.64–7.08)</td>
<td>0.414</td>
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</tr>
<tr>
<td>Model 2**: Predict frequency of trail use (ref= 3 times/week or fewer)</td>
<td>0.1295</td>
<td></td>
<td></td>
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<tr>
<td>Age group (ref = younger than 40 years)</td>
<td>1.98 (0.93–4.24)</td>
<td>0.077</td>
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<tr>
<td>Exercise with others (ref = with someone)</td>
<td>2.17 (1.03–4.56)</td>
<td>0.040</td>
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</tr>
<tr>
<td>Number of activities other than trail use</td>
<td>1.40 (1.13–1.75)</td>
<td>0.002</td>
<td></td>
</tr>
</tbody>
</table>

* n = 151 after excluded 3 influential data points, Hosmer & Lemeshow Goodness-of-Fit Test Chi-square (6) = 2.095, P-value = 0.911.

** n = 143, Hosmer & Lemeshow Goodness-of-Fit Test Chi-square (8) = 4.094, P-value = 0.849.

Final model obtained using stepwise selection with p.entry & p.stay = 0.15.

Table 5 Logistics Regression Analyses* for Time Spent on Trail and Frequency of Trail Use

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